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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,468	01/28/2004	Frederick W. Giacobbe	Serie 6481	8586

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EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,468

Applicant(s)

GIACOBBE ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 7/2004 & 1/2004

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29-43, 45-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "and/or" in part v is indefinite as to its meaning – claims 32 and 40.

Since claims are comprising in nature, the term "or" encompasses both "or" as well as "and". Thus it is deemed that applicant intends "and/or" to mean something other than "and or or" – but it is unclear what that would be.

From MPEP 2173.05(h):

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See *Ex parte Markush*, 1925 C.D. 126 (Comm'r Pat. 1925).

Presently, claims 43 and 48 have a group which is very similar to the above accepted form, but there is no indication that the group is "consisting of" the members. Therefore it is impossible for anyone to tell if applicant's group is open or closed to additional members - and thus the claim presents uncertainty or ambiguity with respect to the

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question of scope of the claim. If the above "acceptable form" is not desirable for Applicant, Examiner can be telephoned for other expressions.

Claim 44, step h) there is no antecedent basis for "the associated seal orifice"

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant argues that Lu is not enabling.

The MPEP sets forth what must be considered to establish whether the enablement requirement is met.

2164.01(a) Undue Experimentation Factors

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue." These factors include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and

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(H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

After considering all of the above features, it is deemed that A-E and H suggest the invention is enabled.

However, applicant indicates (bottom of page 13 of 9/13/2006), that Lu is not enabled as to the means for manipulating the cap assembly. It is deemed that applicant's position is that the iris plate is not enabled. Since an iris plate is the same thing as an iris diaphragm. Thus it is deemed that it is applicant's position that the manipulation of applicant's own iris/cap assembly is also not enabled.

Weighing Applicant's admission with factors A-E and H, it is deemed that applicant's admission outweigh factors A-E and H and thus support a finding of non-enablement.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be o

obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 29-35 and 37-43, 45-47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu 6789400.

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Claim 32: See prior Office action for how Lu is applied. Claim 32 newly requires that each adjustable seal is an iris diaphragm. As per col. 8, lines 48-60, Lu discloses that it is known to use iris plates in fiber coolers. It would have been obvious to use the iris plates as the tailorable partitions because they are the only adjustable partitions that Lu discloses. The term "iris" implies to one of ordinary skill a series of sliding plates that combine to form a generally circular orifice.

From MPEP 2144.01 Implicit Disclosure:

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

See also, *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir 1985).

Claims 33-35, 37-40, 47 and 49 are clearly met. As to claim 41, it would have been obvious/inherent to select/achieve a flow rate – because it is clear that a random flow rate would randomly alter the fiber cooling. It would have been obvious not to have a random process because such would likely cause random fiber properties – and thus customers/users would be unable to know what they are actually buying/using.

Claims 42-43: see col. 4, lines 39-49. Claims 45-46; see prior Office action.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu 6789400 as applied to claim 35 above, and further in view of Deneka 4792347.

Lu does not teach the use of the extra gases of claim 36. However it is well-known to treat fibers with gases of claim 36 – see Deneka col. 6, lines 17-24 and col. 8, lines 50-66. It would have been obvious to use any of the Deneka gases – for the rationale/motivation taught by Deneka just prior to providing the coating in Lu.

Claim 42-44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu 6789400 as applied to claim 32 above, and further in view of Marcelissen 5942020 and optionally in view of Deneka 4792347 and/or Wikipedia.com's "control system" entry.

Claims 42-43: Lu does not disclose analyzing the gas. Marcelissen discloses that it is known to monitor the gases in fiber drawing processes, so that one can control the gases in the apparatus (col. 4, lines 18-43 and elsewhere). It would have been obvious to monitor the gas composition in the Lu process (or all of the compositions in the Lu – Deneka combination as set forth in the claim 36 rejection above) so as to ensure that the gases actually are as they should be as disclosed in Lu and/or Deneka.

It is generally not invention to monitor some parameter when it is taught to have a specific parameter. In this case - gas.

As to claim 48: See how the various limitations are addressed in the above discussion of the other claims which have the same limitations. Claim 48 has an additional limitation of manipulating a seal or a flow rate when the concentration exceeds a threshold value. Marcelissen discloses manipulating the flow rate substantially at col. 4, lines 29-43. It is deemed that substantially any value is a threshold value. In other words, it is deemed that Marcelissen adjusts on any or all values – each one is considered to be a threshold value.

Wikipedia can be used as follows: It teaches that (at the fourth full paragraph of page 2) that for control systems, designers have to be concerned about wearing out components by too frequent adjustments. To remedy this, dead bands are used. It would have been obvious to use deadbands in the Marcelissen controller, so as to not wear out the components. It is deemed that the limits of the deadbands are thresholds, above or below which the gas flow is adjusted.

Claim 44: requires (in addition to limitations covered above) that the adjustable seals are adjusted based on the concentration of a component of the gas. Lu, at col. 7, lines 6-9 teaches adjusting (i.e. tailoring) the size of the opening based on operating conditions. Col. 1, lines 62-64 indicates that coolant purity is an important operating condition. It would have been obvious to base the adjustable seal control based on all of the disclosed conditions – including the coolant purity – so as to maximize the flexibility of the apparatus.

Response to Arguments

Applicant's arguments filed 13 September 2006 have been fully considered but they are not persuasive.

It is argued that since "manipulating" has a different definition from "tailoring", Lu's "can be tailored" limitation is different from applicant's manipulating. Applicant indicates that to tailor means to make, alter or adapt for a particular end or purpose. Examiner is unconvinced. Applicant's argument suggests that the relevant passage of Lu (col. 7, lines 6-9) should be interpreted to mean the chambers and openings can be made, altered or adapted.... This does not appear to be a reasonable interpretation. Substantially anything can be made, altered or adapted for a particular end or purpose – anyone skilled in the art understands this. It would not seem reasonable to ever state that an apparatus can be merely made, altered or adapted – because that could be applied to any machine-type invention. In other words: applicant's proposed interpretation of Lu is such that the relevant passage carries no substance beyond the inherent, fundamental fact that the machine can be made, altered or adapted. Since this would apply to every machine ever made, it would be rather meaningless. One would generally not ascribe a meaningless interpretation to any passage – unless it is very clear that such is the only reasonable interpretation.

It is further argued that one of ordinary skill would have understood "tailored" as actually removing or adding material to the partitions. Applicant does not provide any

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evidence for this assertion. Assertions cannot take the place of evidence. Furthermore, such directly contradicts applicant's evidence and arguments that tailoring means "making, altering or adapting". Applicant gives no indication how/why one would derive "removing or adding" from the making, altering or adapting definition.

Furthermore, as cited in the last Office action, MPEP 2144.04 indicates that making something adjustable is usually obvious.

Applicant argues that Lu is not enabling.

The MPEP sets forth what must be considered to establish whether the enablement requirement is met.

2164.01(a) Undue Experimentation Factors

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue." These factors include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Since applicant has not provided a proper analysis, and since the US Patents are presumed to be valid (and thus enabled) applicant's assertion is not convincing

It is further argued that Lu does not specify how partition openings can be tailored. Col. 7, line 6-9 discloses it can be tailored by tailoring the size – See also, col. 8, lines 51-60 which discloses using an iris plate of different diameters.

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It is further argued that Lu does not disclose an iris diaphragm with a series of sliding plates. Examiner disagrees: one would immediately infer that Lu's iris has the sliding plates. Note, Applicant admits on page 7, lines 2-11 that irises are conventional - commercially available. See also the Wikipedia.com entry for "Diaphragm" which indicates that the term "iris diaphragm" means the same the same thing as "iris".

It is also argued that Lu fails to disclose manually adjusting the iris – thus In re Venner is not applicable. It thus deemed that applicant is arguing that Lu has no manual adjustment. Therefore it is applicant's position that Lu has automatic adjustment – and thus applicant's position is that Lu reads on the claims.

The arguments regarding the sensing of the gas are noted, but are moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

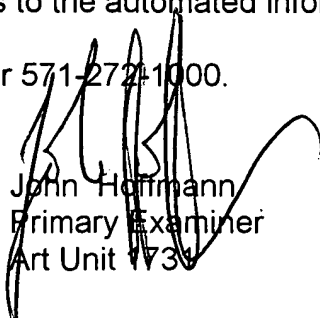
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John Hoffmann
Primary Examiner
Art Unit 1731

10-31-06

jmh..